



botanical illustration

an exhibition held at the
Thomas Fisher
Rare Book
Library

July 29 to
October 4
1985

BOTANICAL ILLUSTRATION

an exhibition held at the

Thomas Fisher Rare Book Library

University of Toronto

July 29th - October 4th, 1985



Digitized by the Internet Archive
in 2025 with funding from
University of Toronto

<https://archive.org/details/botanicalillustr00jocz>

BOTANICAL ILLUSTRATION

As the science of botany developed, so too did the art of botanical illustration. Herbals, so popular in the Middle Ages, were among the first books to be printed, reproducing the crude, stylised figures of plants from the medieval manuscripts which were decorative rather than instructive. The text was of prime importance enabling the reader to make use of familiar plants for medicinal purposes. It was not until the seventeenth century that flowers began to be appreciated for their beauty as well as their medical properties. Botany and medicine continued to go hand in hand, however, many botanists being also physicians and many forming or directing the herbal gardens, often attached to medical schools, that supplied the plants used in treating diseases.

By the seventeenth century new species were being introduced into the gardens of Europe through the travels, correspondence, and trade of botanists and their friends. As the great gardens of the wealthy developed, there arose a need and desire for accurate depictions of the splendid flowers being cultivated in them and the best artists of the day were employed to draw them. The development of copperplate etching and engraving towards the end of the sixteenth century meant that minute details could now be recorded. Attempts to classify plants into genera finally culminated in the system of Linnaeus which gave increased impetus to the whole study of botany. Through the scientific and newly formed botanical societies information about plants and the species themselves were disseminated far and wide. As time passed the illustration in botanical works often became the focal point, the text being relegated to second place to elucidate the figure, the most successful and lively depictions occurring where both artist and writer were botanists and working closely together.

The eighteenth century was the great age of botanical illustration. An unhurried age where there was time and leisure to perfect details, it produced wealthy patrons, usually botanists in their own right, who provided the money to publish magnificent and expensive folios.

By the nineteenth century the ability to paint flowers had become an accomplishment of every young lady of fashion and good teachers were much in demand.

This exhibition is not meant to be a history of botanical illustration but merely to provide a feast for the eyes. Please enjoy it!

CASE 1: EARLY BOTANICAL BOOKS

Herbarius Latinus. [Louvain: Jan Veldener, ca. 1485-1486]

Pietro Andrea Mattioli. De Plantis Epitome Vtilissima. Francofvrti ad Moenvm, 1586.

Mattioli (1500-1577) was a renowned physician and one of the most outstanding botanists of his day. His commentary on Dioscorides (1544) embodied all the known information on plants and came to be accepted as the standard of descriptive botany by all subsequent authors for another century. The illustrations of the Iris in the De Plantis Epitome Vtilissima have been chosen to show the contrast with the stylised figure in the Latin Herbarius printed a hundred years earlier.

Hieronymus Bock. Kreutterbuch. Strassburg: Gedruckt durch J. Rihel, 1565.

Bock (1498-1554), or as he preferred to be known, Tragus, was a Lutheran pastor and physician who was also an inspired botanist and the first to describe plants clearly.

Dietrich Dorsten. Botanicon, Continens Herbarvm, Aliorvmqve Simplicium. Francoforti: C. Egenolphus excudebat, 1540.

Nothing seems to be known about Dorsten except that he was born in 1492 and died in 1552, but his illustrations and text, though apparently borrowed from other works, are delightfully clear and concise.

Pictured in Bock and Dorsten are studies of the Seeblüm or Nymphaea (Water lily).

Leonhart Fuchs. De Historia Stirpivm. Lvgdvni: Apud B. Arnolletum, 1549.

Immortalised in the Fuchsia, a plant he never saw, Fuchs (1501-1566) began his brilliant career early in life, matriculating at the age of twelve. He became physician to the Margrave of Brandenburg and later was appointed to the chair of medicine at Tübingen where his lectures were extremely popular. As a botanist he added forty plants to those previously published and was the first to include a glossary of botanical terms. The woodcuts are the work of Clement Boussy or Bussy.

Rembert Dodoens. Stirpivm Historiae Pemptades Sex. Antverpiae: Ex officina C. Plantini, 1583.

Professor of medicine at Leyden, Rembert Dodoens (1517-1585) relied on friends and correspondents to provide him with plants which he then accurately described. This collection of his botanical writings rather popularised the study of botany than added to the sum of its knowledge.

During the last part of the sixteenth century the famous printing house of Plantin in Antwerp was responsible for a number of notable botanical works, including this one, many of the drawings for these books being made by Pieter van der Borcht (1545-1608).

Note the two treatments of the *Rhodia Radix* (Roseroot) in Fuchs and Dodoens.

CASE 2: THE POTATO

John Gerard. The Herball, or, Generall Historie of Plantes. London: Imprinted by I. Norton, 1597.

Noted as a skilled herbalist, John Gerard (1545-1612) not only supervised the gardens of Lord Burghley but also cultivated his own garden in London. He was interested in plants mainly for their medicinal qualities but he also noted their decorative value and uses as sources of food. He was the first to mention the potato, though his statements about its place of origin misled historians for three hundred years. Although Gerard has been accused of using the work of Dodoens and others as his own, his Herball is charmingly written and enhanced by his own observations and allusions to contemporary persons and places.

Charles de l'Écluse (Carolus Clusius). Rariorvm Plantarvm Historia. Antverpiae: Ex officina Plantiniana, apud I. Moretum, 1601.

L'Écluse (1526-1609) can be considered a true figure of the Renaissance, being versed in many disciplines besides botany and speaking at least eight languages. Despite precarious health and poverty he travelled widely in Europe and lived in Antwerp and Vienna before becoming director of the botanic garden at Leyden in 1593.

His "work was practical and descriptive ... It remains of high value even to-day, on account of his genius for detecting the essential specific features of plants, and, in spite of the limited scientific terminology of the day, for giving recognisable descriptions of them." (Blunt) He first heard of the potato in 1588 when Philippe de Sivry of Hainault sent him two tubers. L'Écluse not only cultivated it himself but was responsible for introducing it throughout Europe.

John Parkinson. Theatrum Botanicvm. London: Printed by T. Cotes, 1640.

Parkinson (1567-1650) was apothecary to James I and the owner of a garden "well stored with rarities." (DNB) The Theatrum Botanicvm describes nearly a thousand more plants than did Gerard, including twenty-eight species not previously recorded in Britain. The potato is here included in a short chapter on the uses of various roots and is nicely illustrated.

CASE 3: LILIES

Philip Miller. Figures of the Most Beautiful, Useful and Uncommon Plants Described in the Gardeners Dictionary. London: The Author, 1760.

Philip Miller (1691-1771), the greatest gardener of his age, was for forty-eight years superintendent of the Chelsea Physic Garden. His Gardeners Dictionary, first published in 1724, was reprinted many times. These Figures were drawn from plants growing in the Chelsea garden and were intended as a series of illustrations of all known genera. The Asphodel lily shown is from a drawing by Richard Lancake.

John Hill. The British Herbal. London: T. Osborne & H. Shipton, 1756.

Described as a miscellaneous writer (DNB), John Hill (1716?-1775) had a chequered career. Quarrelsome, conceited, entertaining, unscrupulous and industrious: these are only some of the epithets used to describe him. The British Herbal is chiefly interesting as being one of the first publications to appear after Linnaeus's Species Plantarum (1753), which so drastically altered the path of the science of botany and which Hill did not hesitate to criticise. The plate exhibited includes various types of water lily.

Thomas Martyn. Thirty-Eight Plates, With Explanations, Intended to Illustrate Linnaeus's System of Vegetables, and Particularly Adapted to the Letters on the Elements of Botany. London: B. and J. White, 1794.

Thomas Martyn (1735-1825) followed his father as professor of botany at the University of Cambridge and held this post for sixty-three years. The Letters on the Elements of Botany (1785) included eight by J.J. Rousseau (printed separately in 1805 as La Botanique; see Case 6) and twenty-four by Martyn and were intended to popularise Linnaeus's system of plant classification. These Thirty-Eight Plates gave them further botanical value. All were drawn and engraved by Frederick Polydore Nodder (d. 1800?), "Botanic Painter to Queen Charlotte". The book is open at the *Lilium candidum* (White lily).

CASE 4: FOXGLOVE

Joseph Pitton de Tournefort. Institutiones Rei Herbariae. Editio tertia. Lugduni: juxta exemplar Parisiis, e Typographia Regia, 1719.

The extensive botanizing travels of Tournefort (1656-1708) in Europe and the Orient gave him a thorough knowledge of plants. In 1683 he was appointed professor of botany at the Jardin du Roi in Paris where he gradually worked out a system of classifying plants by genera, based chiefly on the characteristics of the corolla, many of the names coined or accepted by him being later adopted by Linnaeus. Most of the illustrations used in the Institutiones Rei Herbariae were originally drawn by Claude Aubriet (1665-

1742) who worked very closely with Tournefort and the crispness of whose work shows an appreciation of plant structure not previously evident. His name is commemorated in the *Aubrietia* (commonly called *Aubretia*).

William Withering. An Account of the Fox-Glove, and Some of its Medical Uses. Birmingham: Printed by M. Swinney, for G.G.J. and J. Robinson, London, 1785.

Renowned as a physician and with a large practice in Birmingham, Withering (1741-1799) wrote the first scientific treatise on the use of a medicine derived from a plant -- *digitalis*. The magnificent plate of the foxglove was drawn and engraved by James Sowerby (1757-1822), an accomplished artist and a distinguished botanist in his own right (see also Case 7).

William Woodville. Medical Botany. London: Printed and sold for the author, by J. Phillips, 1790.

In 1791 Woodville (1752-1805) became physician to the smallpox and inoculation hospital at St. Pancras in London. Greatly interested in botany he appropriated two acres near the hospital as a botanical garden. His Medical Botany, the first volume of which was published in 1790, describes all the plants mentioned in the Pharmacopoeias of the Royal Colleges of Physicians of London and Edinburgh. Each illustration is accompanied by an account of the medicinal effects of the plant.

William Curtis. Lectures On Botany. London: H.D. Symonds, 1805.

As "demonstrator" at the Chelsea Physic Garden, Curtis did much to further the knowledge of plants. His great interest was in the flora of Britain, especially that growing in the neighbourhood of London. His Lectures were illustrated after his death in 1799 by his friend and companion on many botanizing expeditions, Sydenham Edwards (1769?-1819).

Robert John Thornton. New Family Herbal. London: R. Phillips, 1810.

Thomas Martyn's lectures at Cambridge caused Thornton (1768?-1837) to change his studies from the Church to medicine and botany, and eventually he became lecturer in medical botany at Guy's Hospital. This popular account of plants was illustrated with woodcuts by Thomas Bewick, after drawings by John Henderson.

CASE 5: EXOTICS

Jacobus Breynius. Exoticarum, Aliarumque Minus Cognitarum Plantarum Centuria Prima. Gedani: Typis, sumptibus & in aedibus auctoris, imprimebat D.F. Rhetius, 1678.

Breynius, a wealthy Danzig merchant, who lived from 1637 to 1697, was able to indulge his love of plants. The Exoticarum ... Centuria Prima grew out of his desire to make known the flowers he most admired in his own garden and those he had seen in Holland. Most of the beautifully clear plates were drawn by Andreas Stech and engraved by Isaac Saal. The book is open to show *Saxifraga angustifolia autumnalis*.

Jacques Philippe Cornut. Canadensium Plantarum, Aliarumque Nondum Editarum Historia. Parisiis: Venundantur apud S. Le Moyne, 1635.

Cornut (1606-1651) was a physician practising in Paris. He never came to Canada but acquired his information in the gardens of Vespasien Morin, botanist to the King of France, and Jean Robin, who was director of the Jardin du Roi. Among the illustrations is the first depiction of what came to be known as the Guernsey lily (*Nerine sarniensis*), named for plants found growing on the Guernsey coast after a shipwreck.

Engelbert Kaempfer. Amoenitatum Exoticarum Politico-Physico-Medicarum Fasciculi V. Lemgoviae: Typis & impensis H.W. Meyeri [1712]

As chief surgeon to the Dutch fleet Kaempfer travelled extensively in Japan between the years 1690 and 1692. This important work is the first to describe and illustrate the plants of the Orient. Shown is the first view to Western eyes of the Camelia (Tsubaki). After his death in 1716, Kaempfer's library and collections were acquired by Sir Hans Sloane and are now in the British Museum.

Carl von Linné (Carolus Linnaeus). Hortus Cliffortianus. Amstelædami, 1737 [i.e. 1738]

George Clifford (1685-1760), an Anglo-Dutch banker, was the owner of magnificent gardens at Hartecamp in Holland. His happy employment of Linnaeus to describe the rare plants growing on his estate and of Ehret to depict them resulted in this magnificent volume. Georg Dionysius Ehret (1708-1770) was one of the outstanding botanical artists of the eighteenth century. He spent most of his working life in England, where he married the sister-in-law of Philip Miller and where he achieved great popularity as a teacher. In the Hortus Cliffortianus Linnaeus (1707-1778) foreshadowed his Species Plantarum and indeed constantly refers to it in the latter work. The *Collinsonia* exhibited was named for Peter Collinson (1694-1768), the first to grow it in England from seeds sent to him by John Bartram (1699-1777), whose garden on the Schuylkill River near Philadelphia had become an important source of seeds and plants for European gardens.

CASE 6: REDOUTÉ

Charles Louis L'Heritier de Brutelle (1746-1800). Cornus. Parisiis: Typis P.-F. Didot, 1788 [i.e. 1789]

Jean Jacques Rousseau (1712-1778). La Botanique. Paris: Delachaussée, 1805.

Both these beautiful volumes are illustrated by Pierre-Joseph Redouté (1759-1840) who was the most celebrated flower painter of his day. After he had spent ten years as an itinerant artist and a stint as a designer of stage scenery in Paris, Redouté's love of flowers took him to the Jardin du Roi where he attracted the attention of the wealthy botanist L'Heritier de Brutelle who taught him the essentials of plant structure and commissioned him to provide many of the illustrations for Stirpes Novae (published 1785-1791), which records the plants growing in Paris, and Cornus. Redouté's botanical exactness, mastery of perspective, and love for the subject allow his flowers to live on the page. From Cornus, a work on the Dogwoods, the plate for Cornus canadensis is shown in two states, one coloured, one uncoloured, with L'Heritier's text. Some of the lovely plates from Stirpes Novae are exhibited in the West Reading Room.

After L'Heritier was assassinated in 1800, the Empress Josephine became Redouté's chief patron. She spent enormous sums on the purchase and cultivation of choice flowers at Malmaison and made Redouté her official artist.

The plates for Rousseau's La Botanique were printed in colour, then retouched with water-colours until they have almost the quality of the original drawings. The volume is open at the splendid Aster chinensis.

CASE 7: BRITISH PLANTS

Charlotte and Juliana Sabina Strickland. Specimens of British Plants. Manuscript. [179-?]

Very little is known about these two extremely accomplished botanical artists. Born in Yorkshire, they later moved to Gloucester where Charlotte died in 1833 and Juliana Sabina in 1849. They provided the plates for Select Specimens of British Plants (1797), edited by their brother-in-law, Strickland Freeman (1754-1821). Possibly these are some of the original drawings for that work.

Exhibited are Grass of Parnassus (Parnassia palustris) by Charlotte and Wood betony (Betonica officinalis) by Juliana Sabina.

James Edward Smith. English Botany. The second edition. London: Printed by R. Taylor, for C.E. Sowerby [1832-1846]

First published in thirty-six volumes between 1790 and 1814, this work was intended to describe and illustrate all indigenous British plants. Illustrated by the celebrated artist James Sowerby (see also Case 4), it is often known by his name alone as Smith's did not appear in the first three volumes. Sowerby's sons were also botanical artists, the second, James De Carle (1787-1871), contributing some plates to the later volumes and many to

the Supplement (published 1831-1849). The third son, Charles Edward, was responsible for the publication of this second edition, reduced to twelve volumes with the descriptions abridged.

Sir James Edward Smith (1759-1828) came from a wealthy family and so, although trained as a medical doctor, was able to devote his time to his great interest, botany. His many publications did much to advance its study and he was praised by his contemporaries for the accuracy and clarity of his descriptions and elegance of style. After the death of Linnaeus's son in 1783 Smith bought all the collections and library of Linnaeus and was instrumental in founding the Linnean Society in 1788. Pictured is Common cotton grass (*Eriophorum angustifolium*).

Thomas Moore. Nature-Printed British Ferns. London: Bradbury, Evans [pref. 1859-1860]

Moore (1821-1887), the curator of the Chelsea Physic Garden, was especially interested in ferns. The illustrations are nature printed by Henry Bradbury. In this process the actual plant is impressed into the plates from which the illustration is printed. The fern exhibited is *Athyrium filix-foemina*, var. *crispum* (Lady fern). "It is a very elegant dwarf plant, and was originally found by Mr. A. Smith, on Orah, a hill in the county of Antrim, Ireland."

CASE 8: ORCHIDS

James Bateman. The Orchidaceae of Mexico & Guatemala. London: The Author, Ackermann, J. Ridgway [1837-1843]

This splendid volume comprises a series of coloured plates most made from drawings by two ladies, Mrs. Withers and Miss Drake, the lithographs being executed by a true master of the art, M. Gauci. Mrs. Withers, "Flower Painter in Ordinary to Queen Adelaide", contributed to a number of works between 1827 and 1864 and was one of the many teachers of botanical drawing of that period. Of Miss Drake (fl. 1818-1847) very little is known beyond her work.

James Bateman (1811-1897) was a wealthy landowner who commissioned G. Ure Skinner, a merchant trading to Guatemala, to supply him with orchid bulbs which he then cultivated on his estates. By lecturing on the subject he did much to increase the popularity of the orchid in England. The work was dedicated to Queen Adelaide and only one hundred and twenty-five copies were printed. The subjects pictured, described in lively fashion by Bateman, grew in his own collection and those of his friends.

The volume is open at *Galeandra Baueri* (Mr. Bauer's *Galeandra*). "Mr. Barker's plant produced flowers in the autumn of 1839; and from these, assisted by native specimens more recently discovered by Mr. Skinner in Guatemala, Miss Drake prepared the exquisite drawing from whence the accompanying plate is taken."

The Exhibition continues in the two Reading Rooms on the first floor.

Bibliography:

Blunt, Wilfrid. The art of botanical illustration. 3rd ed. London: Collins, 1955.

Henrey, Blanche. British botanical and horticultural literature before 1800. London: Oxford University Press, 1975.

Hunt, Rachel McMasters Miller. Catalogue of botanical books in the collection of Rachel McMasters Miller Hunt. Pittsburg: Hunt Botanical Library, 1958-1961.

The illustration on the cover is from Dorsten's Botanicon (see Case 1)

Exhibition: Anne Jocz.

Mounted by: Emrys Evans and Linda Joy.

Cover design: Thomas Reid.

Typed by: Andrea Lennox.

